

COMMUNICATION SESSION A

THE SOCIAL CONTEXT OF PUBLIC HEALTH: PROFESSIONAL TRAINING NEEDS IN ARMENIA

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Purpose

To explore possible education and training responses to the public health challenges facing Armenia in the post Soviet period.

Introduction

Following the collapse of the Soviet Union newly independent Armenia has faced serious economic and infrastructural problems. A deepening economic and energy crisis along with dramatic changes in political and social conditions in the early 1990's led to rapid deterioration in the quality of life and health of the population. With increasing levels of poverty, a failing social security system and under resourced health care services, public health services are ill equipped to deal with health challenges of the 21st Century.

In the Post Soviet era, high rates of unemployment have contributed to significant migration within Armenia and emigration of more affluent groups to Europe and America in search of a better life. This combination of a falling birth rate and migration of key economic groups left Armenia with an ageing population and a deficit of high-level skills and knowledge in important areas of the economy. At the same time as smoking and alcohol related problems were on the increase, activities such as public sport, tourism, entertainment that help to strengthen community networks were neglected in the face of a deepening economic crisis. The economic and political changes along with a rapid transition to an unregulated free market economy, has radically altered the public health needs of the population and the role of public health services.

Following privatization of medical services in 1997, access to health care became more difficult for many poorer groups in the population. A general decline in access to health care is reflected in the drop in number of visits to doctors from 9.8 per capita in 1987 to 1.9 in 2002.

State funding of medical services in Armenia is one of the lowest in the world and fluctuates between 0.8 to 1.3% of GDP in 1997-2002. Per capita expenditure on health is about 10 USD a year. Health care resources are inadequately and unevenly distributed with hospital and medical services receiving around 88% of available funding while preventive services receive less than 6%. Public health services have not been updated since Soviet times and remain concentrated in sanitary-epidemiologic stations that continue to focus on infectious disease and environmental problems related to water quality, waste management, food supply etc. Whilst these issues are of importance there is an urgent need for public health services to become more effective at working with communities, promoting health and engaging in multi agency work around community development and regeneration if they are to make any realistic impact on contemporary public health challenges.

Public health training in Armenia still follows the traditional Soviet model in the medical universities and continues to focus almost entirely on epidemiologic issues, food, water, and occupational safety. There is an urgent need to broaden the curriculum, to learn from the experiences of other countries and to develop a public health system which combines health

protection with new strategies in health development and community regeneration designed to improve the health and well being of the Armenian people.

Methods and materials

Review of policy documents, academic literature and official statistics on public health in post soviet countries especially Armenia.

Results

There is a need for public health training incorporate knowledge and skills that will enable practitioners to:

- use modern community based more social approaches, which help to increase community participation in public health
- work in partnership with environmental, economic, and social services as well as NGO's and private agencies linked to the public health agenda.
- become more focused on primary prevention, promoting healthy lifestyles
- gain skills in working with and through educational, cultural, and business partnerships to help regenerate communities and improve the health of the population.
- communicate effectively with individuals and communities, using face to face and the mass media strategies
- develop skills in problem solving; decision making and evaluating public health data and interventions.

Discussion and conclusion

The changes in the social and economic conditions in Armenia following the collapse of the soviet union have had a direct impact on the health of the population. The public health challenges facing Armenia today are a consequence of social and cultural change. If public health services are to be effective in improving the health of the people they must engage in activities that seek to reform and improve social, cultural and economic factors influencing public health. There is an urgent need for trainers to develop more socially coherent and relevant programmes to equip specialists with the essential skills and knowledge to work effectively in the new conditions facing Armenia.

Keywords: Social Health Context

Innovation and Creativity in Public Health Education

Vincent O'Brien

Kyrgyzstan: Engaging Communities



Public Health Curriculum Development in Kyrgyzstan 2002-2004



- Project Achievements
- 19 new courses within two new undergraduate programmes in public health
 - Preventive Medicine
 - Public Health Nursing
- Masters in Public Health
- Dissemination events and products (Forum, web site and DVD)
- Ongoing research and teaching collaboration



Kyrgyzstan



The Impact of the Collapse of the Soviet Union

Table 2. Health indicators, 1990-1997

Indicators	1990	1991	1992	1993	1994	1995	1996	1997
Female life expectancy at birth ^a	73.0	72.7	72.2	71.1	69.9	69.9	71.0	71.2
Male life expectancy at birth ^a	64.4	64.6	64.2	62.5	61.1	61.3	62.5	62.5
Infant mortality rate per 1000 live births ^a	30.2	29.7	31.6	32.9	29.6	27.7	26.6	28.6
Maternal mortality per 100 000 live births ^a	62.9	55.6	49.9	44.5	42.7	44.3	31.5	62.7
Abortions per 1000 live births ^a	41.6	37.7	34.2	31.9	28.5	23.1	22.4	21.2
SDR ischaemic heart disease 0-64 per 100 000 males ^a	103	104	109	135	158	152	153	136
SDR cerebrovascular diseases per 10 000 ^a	60.7	67.7	71.1	79.8	96.0	103.9	91.1	85.8
Syphilis incidence per 100 000 population ^a	1.9	2.1	2.8	4.4	23	74	153	151
Tuberculosis incidence per 100 000, all forms ^a	52.9	56.9	57.9	54.5	61.4	75.4	90.1	114

Source: ^a WHO Regional Office for Europe health for all database; ^b UNICEF TransMONEE database 3.0.

Key Problems



Public Health Foundations



Adapted from Seedhouse, D (1986) *Health: The Foundations for Achievement* Chichester John Wiley

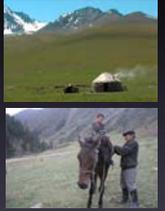
Lifestyle and Culture

QuickTime™ and a H.263 decompressor are needed to see this picture.

Susaanmyr Valley Kyrgyzstan

Research for Change

- Participatory Research
- Collaborative Analysis
- Photo Exhibits
- Participatory Video



Student Video

-What are you doing here?
Just here?

MODEL VILLAGE FOR HEALTH PROGRAMME (MVH) OF ISRA UNIVERSITY: A BASE LINE

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Purpose

The purpose of study was to determine possible health related problems in village Haji Ismail Chand, identify priorities, and make recommendation to take initiatives for improving the health status of Model Village.

Introduction

In 2000 the Isra University assigned the important task of Model Village for Health (MVH) to the Public health department to be implemented between 2000 and 2003. The aims of the MVH were to access the better services to the population with in selected area, increase the effectiveness and the existing health care network, and build institutional capacity to achieve the above objectives and plan to the strategy for future interventions. MVH is establishing primary health care (PHC) programs, focused on maternal and child health care, serving people in the catchment area of selected health facility. Services were improved by training and supporting community health workers, strengthening referral and enhancing the capacity to handle medical emergencies at the peripheral level.

Methods and materials

A descriptive (cross-sectional Study) was done, in Village Haji Ismail Chand is near Isra University, Hala Road Hyderabad. The village population were 500 heads in 60 houses. These houses are built as slums. The people generally low income group. In this well -defined target population every house was selected just as done in "census". The questionnaire was filled from every house.

Results

We obtained information about the household members. All persons who shared needs with the respondent were defined as a household. We had information of 542 household members, from 58 households. The young population was about 44% of less than 15 years of age. The literacy level in MVH was 36% of the people can read at least read and 15% have a matric certification. Males were better qualified than females. Regarding water supply 90% were using handpumps, 71% of the population don't know the nearest government health facility, 53.4% of village population covered by lady health workers, and only 47% were knowing the name of LHW of in village. In village Haji Ismail Chand (MVH) were using Pit hole (56%) type of Toilet facility which were observed very sever damaged situation. In last 5 years of death records total 23 deaths had been observed, majority were due to old age, only 2 deaths were below 1 year observed. No death during pregnancy or within 42 days of delivery in the households. The disease information gathered, this can be arranged according to the population groupings used in the section pre-school children, school, general population. According to disease priority ranking malaria, T.B, Diabetic mellitus, hypertension were on the top list.

Discussion and conclusion

The selected area of village which we called the MVH should become model when priority wise many intervention small programs will be implemented to improve the health, social and economical conditions of the local peoples. In conclusion, MVH should improve the sanitation

epically waste disposal management, toilet facility, education of the children and health education of every body in the village.

Keywords: Model Village for Health, Isra University, Primary Health Care

MODEL VILLAGE FOR HEALTH(MVH) OF ISRA UNIVERSITY: A BASE LINE AND INTERVENTION

Presented by:

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1. Background:

- ❏ In 2000 the Isra University assigned the important task of Model Village for Health (MVH) to the Community Medicine Department to be implemented between 2000 and 2001.
- ❏ The aims of the MVH are to improve the health status of population with in selected area, increase the effectiveness of the existing health care network;
- ❏ and build institutional capacity to achieve the above objectives and plan the strategy for future interventions.

- ❏ Access to better services is being improved by training and supporting creating linkages with community health workers, increasing female paramedical staff, strengthening referral and enhancing the capacity to handle medical emergencies at the peripheral level.

- ❏ Quality is being improved through in-service training of the field staff, upgrading peripheral health facilities, increasing availability of integrating services and increasing management and supervision.
- ❏ Utilization is being improved by encouraging community participation and health education

- ❏ MVH is establishing primary health care (PHC) programs, focused on maternal and child health care, serving people in the catchments area of selected health facility.

- ❏ This survey was conducted to assess demographic and village health profile in which the model village for health is being implemented at the time of providing the inputs.
- ❏ Another survey will be conducted at the end of the project to measure the change in this area after the provision of inputs.

2. Aim of Survey:

- ❧ The aim of survey is to determine possible health related problems in village Haji Ismail Chand.
- ❧ Identify priorities,
- ❧ Make recommendations to take initiatives for improving the health status of Model Village.

3- Objectives: -

- ❧ To determine the demographic situation such as Age, Sex and Martial status and education level of people in village Haji Ismail Chand.
- ❧ To determine the water, sanitation and deaths during the last 5 years in village Haji Ismail Chand.
- ❧ To identify the people's perceptions regarding Utilization of health facilities and diseases priorities in general population, pre-school children, school children and maternal morbidity in village.
- ❧ To finalize recommendations / suggestions of the base line survey for intervention in Model Village for health.

Health Facility:

- ❧ Isra Welfare Hospital was chosen as health facility for "Model village for health" in district Hyderabad; this facility has Surgical, Medical, Gynae & Obs service. Moreover it is located near the selected village.

Site of Study:

- ❧ Village Haji Ismail Chand is near Isra University, Hala road Hyderabad. The village population is approximately 500 heads residing in 60 houses.
- ❧ These houses are built as slums (Katchi Abadies). The people generally belong to low income group. The main sources of income are agriculture, cattle farming, small business and daily wages labor-work.

Sample Selection:-

- ❧ In this well-defined target population village Haji Ismail Chand, every house was selected just as is done in "census" performed at village.
- ❧ The questionnaire was completed once from the entire household in the village, so that each household in the village got equal chance to be surveyed.
- ❧ Household means persons residing in the same compound and share common Kitchen, Head of the household was expected to answer the questions.

Selection and training of interviewers:

- ❧ The Community Medicine department of Isra University selected male students from M-1 batch (1997-1998). These students were learning the community medicine subject for last 3 years and had good communication skills.
- ❧ They received one day training prior to conducting the survey, during the workshop the aims of the Model Village for Health and survey were stressed,

the interviewers were familiarized with questionnaires and they practically administering the questionnaire among each other, before going to the field site.

Date Management

- Data collection took place on 2nd of February 2001. The field editor duty was performed by Dr. Tufail Ahmed Bhatti (Lecturer in Community Medicine Department) who was present in the field at all-times during data collection.
- When the interviewers completed the forms the editor checked them for completeness and consistency.
- Questions were included in the questionnaire to check for errors of data collection. The data were analyzed manually by students in the groups then data were double entered in MS – Word and Excel Program.

Results:

- We obtained information about the household members.
- All persons who shared needs with the respondent were defined as a household.
- These data are based on information about household members provided by our respondent (who was generally the head of the household).
- We have information on 542 household members, from 58 households.
- This is a Young population; about 44 % of the population is less than 15 years of age.
- The literacy level in Model Village of Haji Ismail Chand is fair 36% of the people can at least read, and 15 % have a matric or higher certification. Males are better qualified than females.

MARITAL STATUS OF STUDY POPULATION OVER 15 YEARS OF AGE, VILLAGE HAJI ISMAIL CHAND FEBRUARY 2001.

Category of Marital Status	Numbers	%
Married	138	40.2
Not married	191	55.6
Divorced	1	0.29
Separated	1	0.29
Widowed	12	3.7
Total	343	

TABLE:
EDUCATION STATUS OF STUDY POPULATION AGED 6 – 70 YEARS OF BY SEX
VILLAGE HAJI ISMAIL CHAND FEBRUARY 2001.

Education Status	Male		Female		(Total)
	Numbers	%	Numbers	%	
Illiterate	107	40.5	108	48	215
Can read	4	1.5	9	4	13
Can read & write	11	4.1	11	4.8	22
Primary education	77	29.1	66	29.3	143
Metric	48	18.1	10	4.4	58
Intermediate	6	2.2	0	0	6
Graduate	10	3.7	1	0.4	11
Can read Quran only	0	0	19	8.4	19
Don't know	1	0.37	1	0.37	2
Total	264		255		489

House Hold Information

The socio-economic status is outlined in this survey by asking the respondent the availability or non-availability of type of house, durable goods, presence and number of Cattle.

TABLE
MEANS OF WATER SUPPLY IN VILLAGE HAJI ISMAIL CHAND, FEBRUARY 2001.

Means of water supply	Numbers	%
Hand Pump	53	91.40
Well	0	0
Outside the House	2	3.45
Public tap	0	0
Tanker	0	0
Vendor	0	0
Others	4	5.16

Type of house in Village Haji Ismail Chand:

Type of House	Numbers	%
Pucca	34	58.62
Semi Pucca	18	31.03
Katcha	4	6.90
Jhonpri	2	3.45

N = 58

Table :
PLACE OF KITCHEN IN THE HOUSE OF
VILLAGE HAJI ISMAIL CHAND, FEBRUARY 2001

Place of Kitchen	Numbers	%
Kitchen inside (living room)	1	1.72
Kitchen Outside Living room	55	94.83
Others	2	3.45

TYPE OF TOILET FACILITY IN
VILLAGE HAJI ISMAIL CHAND, FEBRUARY 2001.

Toilet Facility	Numbers	%
Bucket	1	1.72
Flush	16	27.59
Pit	33	56.89
Others	5	8.62
No Facility	3	5.17

Toilet Facilities in Haji Ismail Chand Village

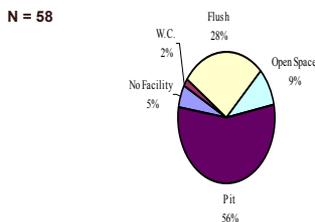
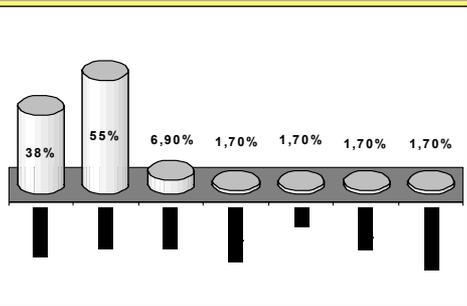


Table #
DEATH STATUS OF STUDY POPULATION
DURING LASTS 5 YEARS.

Age at Death	Male	Female	Total
0 – 1 years	00	02	02
1 – 5 years	00	00	00
6 – 10 years	00	00	00
21 – 60 years	08	04	12
61 and above	05	04	09
TOTAL	13	10	23

☺ No any death of female during pregnancy or within 42 days of delivery in the household during last 5 years.

TYPE OF HEALTH FACILITY UTILIZATION BY THE POPULATION IN LAST ILLNESS, VILLAGE HAJI ISMAIL CHAND



- Seventy percent (70.77%) of the population don't know the nearest Government Health Facility in this area, village Haji Ismail Chand, February 2001.
- Fifty-three percent (53.4%) Of population covered (ever visit) by lady health workers, village Haji Ismail Chand, February 2001
- Forty Six percentage (46.5%) of covered population knowing the name LHW of Village Haji Ismail Chand February 2001

LHW LAST VISIT TO THE COVERED POPULATION VILLAGE HAJI ISMAIL CHAND, FEBRUARY 2001.

Performance of LHW	%
Last month	50%
Within 3 Months	1.7 %
Within 6 Months	3.4 %
Last Year	1.7 %
Never	31 %
Not remember	12 %

N = 58.

WORK LHW DID IN THE LAST VISIT VILLAGE HAJI ISMAIL CHAND FEBRUARY 2001.

ACTIVITIES OF LHW	%
Collect information	19
Registration	22.4
Weigh the child	00
Advice on Family Planning and Weaning	13.8
Given ORS	8.6
Ante natal care	00
Gave Polio vaccination	13.8
Did nothing	22.4

N = 58

Disease Priorities:

- The disease information gathered in the survey asking the respondent their opinion for the most important disease problems in the village Haji Ismail Chand.
- Ranking the major causes of morbidity as reported from household persons is a simple means of summarizing the information on disease from the base line survey.
- This can be arranged according to the population groupings used in the section i.e. pre-school children, school age children, General Population etc.

General Population Group

Disease Priority Ranking	Health Problem
1	Malaria
2	Tuberculosis
3	Diabetes mellitus
4	Hypertension
5	Fever
6	Asthma
7	Skin infection

Population Group (pre-school children) 0 – 3 years

Disease Priority Ranking	Health Problem
1	Malaria, Diarrhea
2	Acute Respiratory Infection , Measles and Malnutrition
3	Skin Infection
4	Eye Infection
5	Intestinal Worms

Population Group (school age 5 – 14 years)

Disease Ranking	Health Problem
1	Malaria
2	Anemia
3	Intestinal Worms
4	Skin infection
5	Others (T.B, Diarrhea)

Population Group (Maternal Morbidity)

Disease Ranking	Health Problem
1	Anemia
2	Causes associated with pregnancies
3	Infection
4	Others (T.B, Diabetes, B.P, Jaundice)

RECOMMENDATION:

- For improving the social status of village Haji Ismail Chand we need to improve the sanitation especially waste disposal management and establish the toilet facility of their houses, this will be fulfilled by improving drainage system (implemented by community participatory method).
- This base line survey shows that LHW of Government sector is not performing their job. So the village needs new Women Health Worker (WHW) appointed by Isra University, which will perform the same job and improve the health status of mother and child.
- Four major diseases have come up to our attention ranking through people's perception. Therefore we will develop the intervening projects such as.

- Malaria Control Program (Spray of whole area, fill the water stagnant pits, collect M.P Slides) etc.
- Dot (Direct Observational Therapy) project for Tuberculosis.
- Health Education and Nutrition Education for Diabetics mellitus and Hypertension related disease
- Train all paramedical staff of welfare hospital in "Community Participation"

IT&C AND TRADITIONAL MEDICINE ACROSS EUROPEAN AND ASIAN CULTURES (TMEA)

Rosa Giuseppa Frazzica

Di Mattia Lino; Noto Salvatore, Sole Fabio
CEFPAS

Purpose

To promote inter-cultural knowledge, understanding, respect and peace by sharing illness-healing related practices and beliefs, through ethno-anthropological field studies, the implementation of a Virtual Platform and a Thematic Network on traditional popular medicine in the European and Asian countries.

Introduction

The increasing mobility of populations from Asian and European Countries makes it important for health professionals worldwide to understand the culture of migrants in order to provide them with more effective care and services.

Methods and materials

Different methods have been used for the various components of the project; its activities have been grouped into six phases:

1. A preparatory step to plan its implementation.
2. A documentary investigation on written, published or on otherwise available information and material referred to popular medicine in each country involved in the project.
3. Field studies: series of ethno-anthropological studies on traditional medicine aiming at exploring how people of different Euro-Asian cultures and social groups interpret the causes of 5 common symptoms/illnesses, (headache, fever, diarrhoea, joint pains, spontaneous abortion), the type of treatment they believe in, and resort to when ill, their perception of efficacy, possible side-effects, and costs. The studies involve 5 target groups (population, traditional healers, PHC Doctors, gynaecologists/midwives, traditional birth attendants) and uses qualitative-quantitative research tools (semi-structured questionnaires and focus-group discussions).
4. Traditional Medicine across Euro-Asian Cultures on the web: creation of a virtual platform and a thematic network to share/exchange information obtained.
5. Monitoring and Evaluation activities.
6. Multiplier effect through dissemination and training.

Results

1. The two International meetings held (2003-Caltanissetta and 2004-Bangkok), the many virtual discussions and the continuous exchange of information through e-mails by the six Partners Teams, have brought about mutual knowledge, respect, understanding and co-operation.
2. Exchange of results of documentary investigation through e-mail discussions and through the project website.
3. Creation of 5 data gathering tools related to the 5 different target groups. They are composed of a common English format, translated into the 6 local languages of the project partners, adapted to the different contexts and pre-tested.
4. Creation of a database, in Excel format, that allows the data entry and the data grouping of the complex quantitative and qualitative information gathered from the field studies performed in the six partners countries. The database is composed of 28 electronic sheets connected by hyper-textual links and supported by pull-down menus facilitating the data entry.

5. The field studies have brought very interesting results. Each country has carried out at least 60 interviews to the general population, 10 to PHC Doctors, 5 each to Traditional Healers, to Gynaecologists/Obstetricians, and to Traditional Birth Attendants.
6. Creation of a common virtual platform in English and six web-sites, one for each partner, in the six local languages. These are linked among themselves and they are all connected to the common platform.

The scripting language used for developing the TMEA common platform refers to the Active Server Pages (ASP) technology. The ITC architecture was built by using one of the most advanced Content Management Systems, which is a software driven by a database that simplifies and automates the construction of Web pages.

The main idea is to facilitate the administration of the TMEA platform and to involve each partner in editing their own Web areas, with each becoming responsible for the publication and updating of their own inputs and outputs.

Discussion and conclusion

The project has achieved its main goal. Important knowledge has been gained and shared on the topic. Health personnel worldwide will have the opportunity to better understand patients from different cultural backgrounds, improve diagnosis and offer more efficient and effective clinical and human quality of care. The virtual platform will also provide concrete and qualified information for populations of all continents on traditional medicine.

Keywords: Traditional medicine, migration, virtual platform





TMEA

Traditional Medicine Across European and Asian Cultures

Authors: Frazzica P; Di Mattia L; Noto S, Sole F

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CEFPAS

Centre for Training and Research in Public Health



- A Sicilian Regional Government Institution
- An organisation similar to Local Health Organisations
- It started its activities in 1996

3




- 16 buildings for 26.000 sqm of covered surface:
- 11 buildings for training
- 1 gymnasium for sports & rehabilitation

6

Purpose

To promote inter-cultural knowledge, understanding, respect and peace by sharing illness-healing related practices and belief through ethno-anthropological field studies, the implementation of a Virtual Platform and a Thematic Network on traditional popular medicine in European and Asian Countries.



IT&C and Traditional Medicine across European and Asian Cultures



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Countries

- Italy
- Greece
- India
- Nepal
- Philippines
- Thailand



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Introduction

- Increasing mobility of populations from Asian and European countries
- Understanding patients' different cultural backgrounds for better health services and care



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Project main components

1. A series of ethno-anthropological studies on traditional medicine in the involved countries
2. A virtual platform and a thematic network to share/exchange information



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1st Project Component

It studies:

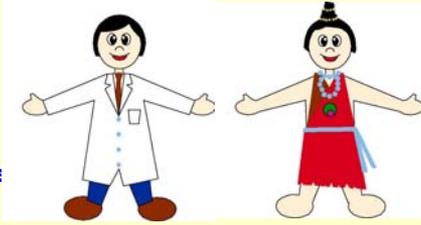
- How people of different Euro-Asian cultures and social groups interpret the causes of specific symptoms/illnesses
- The type of treatment they believe in
- The perceived efficacy
- Possible side effects
- Cost



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Symptoms/illnesses selected

- Diarrhoea
- Fever
- Headache
- Joint pains
- Spontaneous



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Targets

The field studies involve:

- Population
- Traditional healers
- Traditional birth attendants
- PHC Doctors
- Gynaecologists/midwives



Material and methods

The project utilizes:

- Quali-quantitative research instruments
- Ethno-anthropological comparative methods



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2nd Project Component

It aims at:

- Storing collected field data
- Providing multi-lingual information



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Results...

- Organisation of two international meetings (Caltanissetta-Bangkok);
- Exchange of information and results of documentary investigation through e-mail discussions;



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Results...

Development, testing and validation of the data gathering tools related to the 5 different target groups.



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Results...

Each partner has interviewed:

- 60 general population
- 10 PHC Doctors
- 5 TH
- 5 Obstetricians
- 5 TBAs



Results...

Creation of:

- a virtual platform and
- a TMEA e-group were created.



Results...

The database, in Excel format, allows the entry and the data grouping of the complex quali-quantitative information from the field studies in each Country.



The scripting language used for the development of the TMEA common platform refers to the Active Server Pages (ASP) technology.



The ITC architecture was built using one of the most advanced "Content Manager System", a software driven by a database that simplifies and automates the construction of Web Pages.



Discussion and Conclusions

- The virtual platform will provide concrete and qualified health information for populations of all countries
- Professionals worldwide will be able to better understand patients from different cultural backgrounds



Discussion and Conclusions

- Make better diagnosis
- Offer more efficient/effective clinical and human quality of care



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Thank you !

**POSITIVE DEVIANCE AS A BASIS FOR BEHAVIORAL CHANGE IN THE
MANAGEMENT OF OBESITY AND COMPLIANCE TO THE MEDITERRANEAN
LIFESTYLE**

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Purpose

Positive Deviance (PD) is a relatively new way of looking at health problems that require social or behavioral changes. The core idea is that in every community there are a few “deviant” people whose uncommon practices or behaviors enable them to succeed, or find better solutions to pervasive common problems that their neighbors with whom they share the same resource base and surroundings.

Discussion and conclusion

The technique has been used extensively in combating malnutrition in Vietnam and in countries in transition for this trouble but also in relation to other problems as diverse as girl trafficking and HIV/AIDS education. Thus, it is possible to find solutions that have already been found to work in the appropriate context, thereby avoiding a top down approach in favour of a proven community solution. The PD process involves the following: Define the problem, Determine the “Deviant”, Discover their “solutions” that are applicable to the rest of the community, Design appropriate interventions, Do them and monitor the results. This powerful technique may have obvious applications in many other public health challenges such as in combating obesity by concentrating on the lean members of the society or improving diabetic care by finding out how the successful patients manage their disease. Lifestyle management has much to learn from positive deviance.

For more details please see: <http://www.positivedeviance.org>

Keywords: Positive-deviance, lifestyle change

Positive Deviance and the battle against "Globesity"

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ASPHER,
 Yerevan, Armenia, September, 2005

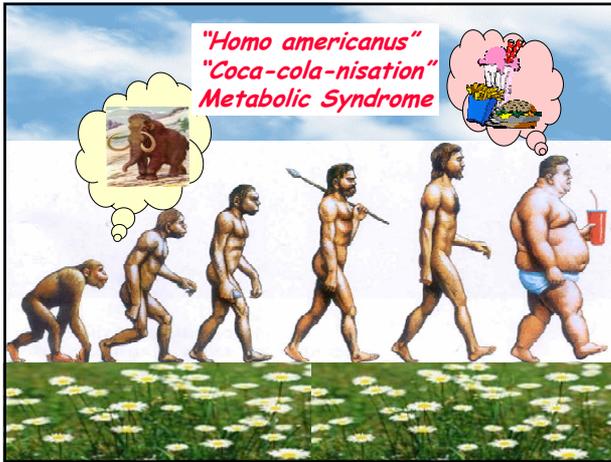
The Joseph H. and Belle R. Braun Hebrew University-Hadassah School of Public Health and Community Medicine

The Catastrophic Failures of Public Health *Lancet Editorial March 6th 2004, 363: 745*

"People are getting fatter & less physically active, and are therefore prone to killer chronic illnesses, such as cardiovascular disease, stroke, cancer and diabetes...."

"But what are public-health physicians and government policy makers DOING about this state of affairs? There is no coordinated strategy, and there is a very poor information base on effectiveness, let alone cost-effectiveness, of interventions and health promotion efforts that are at best piecemeal, at worst non-existent."

"Our public-health leaders must replace prevarication with imagination"



The Physiology of Weight Regulation: 1st Law of Thermodynamics

Energy input **Energy output**

Food **Exercise**
 Basal metabolism
 Thermogenesis

Control factors
 Genetics
 Metabolic Efficiency

INPUT **OUTPUT**

1 "cake" / day = 50 kcal = 18,250 kcal/yr = **+ 2.5 kg/yr**

What is needed to lose weight??

10 min walking/d = 50 kcal = 18,250 kcal/yr = **- 2.5 kg/ yr**

VS

- Eat Less - ALL DIETS WORK!!
- Exercise More
- Keep to the routine ~ Compliance
- Sense of Humor
- = Change in Life Style

Obesity **Heart Disease, Diabetes**
Joints
Economic burden
Morbidity

BMI **Eating Habits**
Body Mass Index **Exercise**
 $Wt\ Kg / [Height\ M]^2$ **Education**
 e.g. $85 / [1.75]^2$ **Socio-Economic Status**

Normal 20-25
 Overweight 25.1-29.9
 Obese > 30 Kg/M²

Adult Obesity (BMI>30) in Israel, 2000: international comparisons: WHO Monica 1987-92, Obes Res 1999



Year	Age / n	At risk + Obese	Country
1999	12-7 / 33000	13%	Finland
1997	10 / 700	14%	Holland
1995	10 / 2960	15%	Germany
2004	19-12 / 3802	15.4%	Israel (Jews)
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2000	13-6 / 970	30%	Spain
2000	10-6 / 1226	31%	Greece
2001	9 / 41149	36%	Italy
2002	12 - 19	46%	USA

Childhood Obesity:
% above the percentile corresponding to adult BMI > 25 (n > 650)

What goes wrong in ISRAEL after ages 12-19??

BMI kg/m ²	25-29 Overweight	≥30 Obese
Boys	12.7%	7.7%
Girls	12.9%	4.1%
Men	46%	20%
Women	33%	26%

National Health and Nutrition Survey (MABAT)

Heart Disease : the early signs

Effectiveness of 5 school interventions of ≥1 year in the prevention of childhood obesity (1993-2003)

study	Yr	#	Age	Nutr Educ	Behav Mod	Exercise	Parent Involve	School Food	Effective
Luepker 1996	3	4019	8.7	X		X		X	No
Caballero 2003	3	1704	7.6	X	X	X	X	X	No
Sallis 1993	2	305	9			X			No
Donnelly 1996	2	338	9	X		X		X	No
Sahota 2001	1	636	7-11	X	X	X		X	No
Gortmaker 1999	2	1295	12	X	X	X			Girls only
Sallis 2003	2	1109				X	X	X	Boys only
Muller 2001	1	297	5-7	X	X	X	X		Yes

Bautista-Castaño et al. Eur J Epidemiol 19: 717, 2004

The Power of Positive Deviance

Solutions before our very eyes!!

The Premise:

In every community there are certain individuals whose **uncommon practices/behaviors** enable them to find **better solutions** to problems than their neighbors who have access to the **same resources**

Marsh et al. BMJ 329, 1177, 2004

Positive Deviance (PD) Approach

Identifying Solutions to Community Problems *Within* the Community - Today

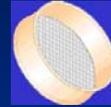


The Key Question?

What enables some members of the community (the "Positive Deviants") to find these better solutions?

The First Steps...

PD Inquiry (PDI) findings are passed through a conceptual "accessibility sieve"



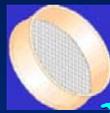
PD Behaviors
Behaviors
Behaviors
Accessible to All

Only those behaviors/strategies accessible to all are kept

The rest are "TBU," True but Useless (i.e. not accessible to all) & are discarded

Malnutrition in Vietnam

PD Inquiry (PDI)
How are some children well – nourished?????



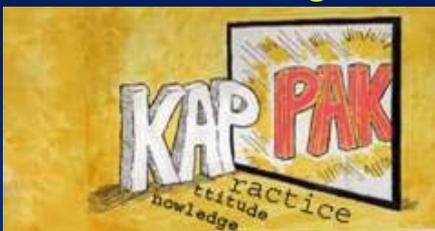
PD Behaviors
Behaviors
Behaviors
Accessible to All

Gathering vegetables	
"Stealing"	"TBU"
Money from outside	"TBU"
All family thin....	"TBU"
Breast feeding etc	

Project aim	Setting	PD Behaviors
Child Malnutrition	Vietnam 1999 - 2000	<ul style="list-style-type: none"> Eating Fruits & Veggies, Shrimp snails, Breast milk, beans, peanuts Boiling Drinking water 5-6 meals/d active feeding Mosquito bed net Immunization Daily bath Early care seeking for illness

Food Nutr Bull 2002, 23 suppl 4, 36

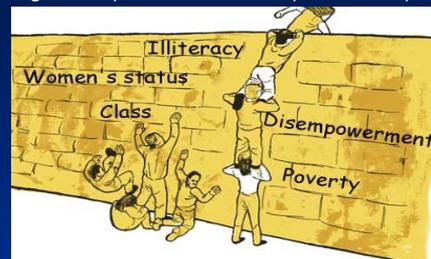
PD Focus on Practice Rather than Knowledge



"It's easier to **ACT** your way into a new way of THINKING, than to THINK your way into a new way of ACTING"

PD Enables us to Act TODAY

Although most problems have complex, underlying causes . . .



Positive Deviants enables finding successful solutions **TODAY** before all the underlying causes are addressed!

The road to Positive Deviance

Design & Do

Discover

Determine Deviants

Define Problem

Community valid

Solution already
WORKS!!!

"Traditional" Instruments of change

Level	Theory
Individual	Stages of Change
	Health Belief
	Consumer Information Processing
	Reasoned action / Behavior
	Information – Motivation - Behavior
Inter-personal	Social Learning: Individual/ Behavior/ Environment
Community	Organization
	Organizational Change
	Diffusion of Innovation

Glance, 1998 with additions - N.Daoud

TRADITIONAL vs POSITIVE DEVIANCE PROBLEM SOLVING APPROACH

TRADITIONAL

Deficit Based:
"What's WRONG here?"

Analysis of underlying
causes of PROBLEM

Externally Driven (by
"experts" or external
authority)

Top-down, Outside-in

POSITIVE DEVIANCE

Asset Based:
"What's RIGHT here?"

Analysis of demonstrably
successful SOLUTIONS

Internally Driven (by
"people like us", same
culture & resources)

Bottom-up, Inside-out

Current Applications of Positive Deviance

Program context	Countries
Childhood development & Malnutrition	> 40 countries throughout the world
HIV/AIDS risk reduction	Myanmar, Indonesia, Viet Nam
Antenatal care, Maternal & Newborn Care, Breastfeeding	Egypt, Pakistan Viet Nam
Female Genital Cutting	Egypt
Girl Trafficking	Indonesia, Nepal
Education Issues	Argentina, US (NSDC)

The origins of Positive Deviance

Wray JD,

Can we learn from successful mothers?

J Trop Pediatr Environ Child Health, 1972,18:27

Wishik SM, Van der Vynckt S,

The use of nutritional "Positive Deviants" to identify approaches for modification of dietary practices

Am J Public Health 1976, 66:38

Antanovsky
"Salutogenesis"

From PD
To TD
=Think Differently !!!
Just do it.....

Q: How could we apply Positive Deviance to the following Public Health problems....???:

- Childhood Obesity
- Violence in Schools
- Better Diabetic control
- Road Traffic Accidents
- Smoking / alcohol cessation
- Regular physical activity
- Immigrant workers' conditions
- Health of Lower socio-economic classes
- Successful Aging
- Etc, etc

www.positivedeviance.org

What Can Be Done to Beat Obesity through PD?



Possible Interventions - must be FUN

- Increase Leisure Activity* - Use of Pedometers: 10,000 steps. **NO STIGMA**
- TV and computer hours - INTERNET education
- How to eat fast food - food choices & cooking
- Building & Maintaining Sports facilities - SCHOOLS
- Incentives to improve Weight & Fitness - tickets to ball games for boys, for girls ???
- "Social engineering" - walk ways, bicycle paths, stairs..



- Monitoring & Evaluation: Positive deviance approach

*Voltaire : "le mieux est l'ennemi du bien"
The best is the enemy of the good"

To encourage activity>> Olympic sportsmen...(Hillel Raskin).



Solving the Problem

- 1 No Single Cause
- 2 No single or quick Solution
- 3 Multi-disciplinary approach
- 4 Long Term Planning

Funding

Industry
HMOs
NGOs

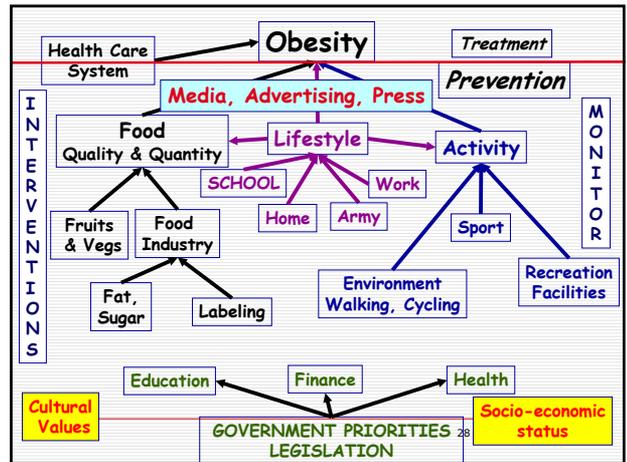
Top Down

Ministry
Local Authority
Health Cities Network
Schools
Family Community



Bottom Up

Socio-Economic Status



THE FIGHT AGAINST OBESITY

- ✓ Food is Fun - incl cooking
- ✓ Nothing is "Forbidden"
- ✓ "Moderation in all things including Moderation"



K'I'S

- ✓ Keep
- ✓ It
- ✓ Short &
- ✓ Simple

✓ **ACTIVITY** is THE most neglected change

"More important what comes out of your mouth than what goes in...."



"According to the labour is the reward"

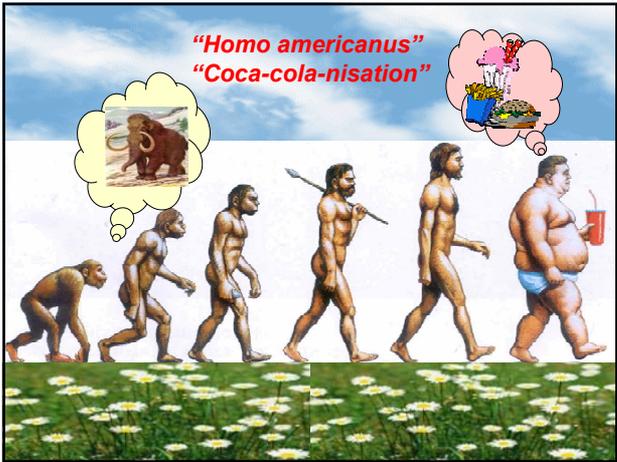
Ethics of the Fathers V, 26



TASK force on Childhood Obesity

- Education & Health Ministries
- Community members
- Parents
- Students themselves
- Families
- Neighbors
- Health professionals
- Communication Advertising experts - INTERNET
- Outside creative thinkers
- "Not more of the same" and "Not People talking to themselves"
- TOP DOWN &
- BOTTOM UP approaches

We know WHAT to do up BUT We do not know HOW to



The Physiology of Weight Regulation: 1st Law of Thermodynamics

Energy input **Energy output**

Food **Control factors** **Basal metabolism**
Genetics **Exercise**
TEF

Metabolic Efficiency

What goes wrong after ages 12-19????

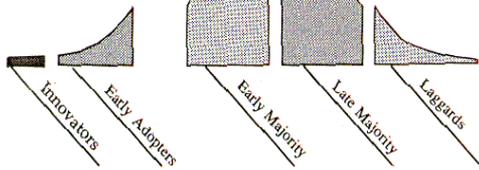
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Boys	12.7%	7.7%
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Men	46%	20%
Women	33%	26%

Project aim	Setting	PD Behaviors
Improve household maternal & new born care	Pakistan 2001	<ul style="list-style-type: none"> ➢ Saving funds & obtaining transport for emergencies ➢ Tetanus vaccination ➢ Clean delivery conditions attendant's hands & blade ➢ Receiving blanket, leaving cord stump undressed ➢ Exclusive breast feeding ➢ Danger sign recognition with prompt care seeking

Food Nutr Bull 2002 suppl 4, 23: 109

PD & The Diffusion of Innovation Life-Cycle

Community participates in discovery of innovation



Thereby jumping the "early adopters/early majority" chasm

Geoffrey A Moore. *Crossing the Chasm.*

PD: Crossing The "Knowledge/Behavior Change Gap"



Project aim PD Behaviors

Reduce girl trafficking

Setting: Indonesia 2004

- ✓ Fear of losing contact with daughter, of disease,
- ✓ Shame from sex work or violating religion
- ✓ Planting multiple crops (beyond coffee)
- ✓ Reducing expenses so daughter stays in village
- ✓ Establishing daughter in small local business
- ✓ Explaining risks of entertainment industry work
- ✓ Identifying & Avoiding neighborhood "brokers"
- ✓ Monitoring daughter's friends
- ✓ Reiterating family values, daughter reports home
- ✓ Investigating out-of-village jobs

Project aim Setting PD Behaviors

Reduce Female Genital Mutilation

Egypt 2004

- ❖ Open discussion between uncircumcised and circumcised women (sharing the "secret")
- ❖ Discussion of the emotional & psychological trauma experienced
- ❖ Discussion with parents (breaking the "taboo")
- ❖ Discussion with Religious leaders

Projects	Setting	Results	RESULTS
Integrated Nutrition projects	Vietnam	<ul style="list-style-type: none"> ❖ Younger malnourished (WAZ <-2) children had less deterioration in Δ [weight for age] Z score -0.05 vs -0.20, $p=0.02$; and Δ [height for age] Z score -0.10 vs -0.23, $p=0.01$. 	
Prospective, randomized evaluation of PD integrated nutrition project: monthly weight for 1 st 7 months and at 12 months n= 240	Phu Tho Province 1999-2000	<ul style="list-style-type: none"> ❖ Intervention diet more energy/d 827 vs 718 Cal/d, $p<0.05$ ❖ & food 410 vs 340 g/d, $p<0.01$ ❖ More likely to meet daily Requirements 49% vs 35%, $p<0.01$ ❖ Less respiratory infections adj OR 0.5, $p=0.001$ 	

Social Net-working ????

The "Inverse Care Law"

People with the greatest need tend to have poorer access to quality services.



**"The rich stay healthy,
the sick stay poor."**

U2
'God Part II'

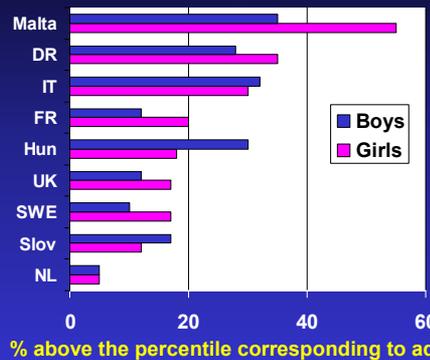
"The rich stay healthy..."

- Higher status people live longer & healthier lives
- Causal effect of economic status on health
 - Access to more & better food
 - Access to medical care
 - Access to education, including health-related knowledge
- **Policy implication:**
- **Improving economic conditions will improve health**

...the sick stay poor."

- Healthier people learn, work, & earn more
- Causal effects of health on economic status
 - Higher labor productivity
 - Higher incentive to obtain education/skills
 - Higher incentive to save
 - "Demographic dividend"
 - Improved health/mortality lowers fertility rates
 - "Quality vs. quantity".... (somewhat controversial)
- **Policy implication:**
- **Improving health will improve economic conditions**
- *Ignoring economic benefits of health interventions undervalues those interventions*

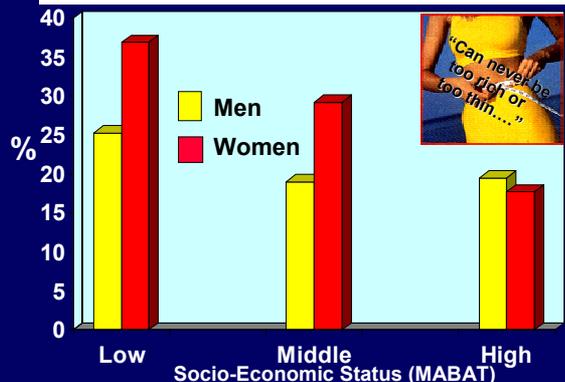
% Overweight & Obese 10 year olds in selected European Countries (IOTF)



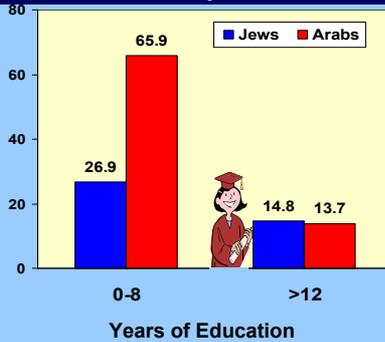
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Childhood Obesity:
% above the percentile corresponding to adult BMI > 25 (n > 650)

Age-adjusted Prevalence of Obesity (%) Increases With Lower Socio-economic Status

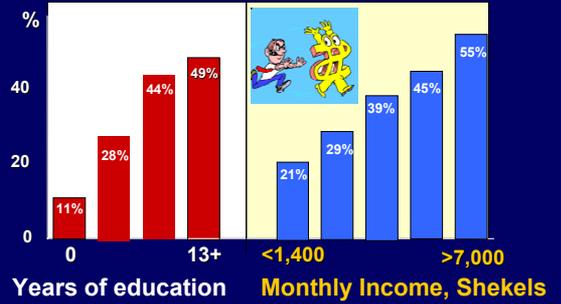


Obesity (BMI>30) in Women is Greater Among the Less Educated and in the Arab Population



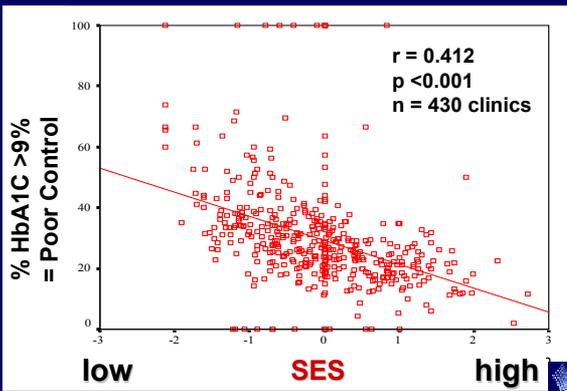
First National Health and Nutrition Survey (MABAT), 1999-2000

Exercise in The Over 60s Increases With Income & Education



Shemesh & Rasooli, 1999

Low SES Associated with POORER Diabetic Control in Clinics



MOTIVATING CHILDREN

- Role of Parents (57% TV/15% exercise together)
 - Role of School Interventions
 - Role of Media
 - Advertising
 - Films
 - Role models: Sportsmen, Pop & TV stars ??!
 - COMMUNICATION Skills
 - From Children - get to Parents: 4X4 → 2X2
- "Educate the child while he is young &, when he is old, he will not stray"...(Psalms)
- "Give me a child till he is seven and he'll be mine till he goes to heaven..."